

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael E. Dockins on 06/03/2009.

The application has been amended as follows:

The claims:

Cancel claims 1-10, 22, 26, 38, 40-48, and 52-61.

Add claims 62-97.

62. (new) A blow molded plastic container including a hollow body and an externally threaded neck providing communication with the hollow body, the container comprising:

a first layer of plastic foam including foam cells;

a second layer of plastic foam including foam cells; and

a third layer of plastic disposed between said first layer and said second layer, wherein the hollow body and the threaded neck are formed from said first layer of plastic, said second layer of plastic, and said third layer of plastic.

63. (new). The blow molded container according to Claim 62, wherein said third layer of plastic comprises a polymer selected from the group consisting of polyesters, acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.

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64. (new) The blow molded container according to Claim 62, wherein said third layer of plastic comprises a polyester.

65. (new) The blow molded container according to Claim 62, wherein said third layer of plastic comprises polyethylene terephthalate.

66. (new) The blow molded container according to Claim 62, wherein said first layer of plastic and second layer of plastic comprise a polymer selected from the group consisting of polyesters, acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.

67. (new) The blow molded container according to Claim 62, wherein said first layer of plastic and said second layer of plastic comprise a polyester.

68. (new) The blow molded container according to Claim 62, wherein said first layer of plastic and said second layer of plastic comprise polyethylene terephthalate.

69. (new) The blow molded container according to Claim 62, wherein said first layer and said second layer of plastic are formed from the same polymeric material.

70. (new) The blow molded container according to Claim 62, wherein said first layer of plastic and said second layer of plastic are formed from different polymeric materials.

71. (new) The blow molded container according to Claim 62, wherein said first layer of plastic, said second layer of plastic, and said third layer of plastic are formed from the same polymeric material.

72. (new) The blow molded container according to Claim 62, wherein said first layer of plastic, said second layer of plastic, and said third layer of plastic are formed from different polymeric materials.

73. (new) The blow molded container according to Claim 62, wherein the foam cells are formed from a gas comprising a gas selected from the group consisting of carbon dioxide, nitrogen, argon, air, and blends and derivatives thereof.

74. (new) The blow molded container according to Claim 62, wherein the foam cells contain a gas selected from the group consisting of carbon dioxide, nitrogen, argon, air, and blends and derivatives thereof.

75. (new) The blow molded container of Claim 62, wherein the container is blow molded from a multi-layered preform formed in a multi-step injection molding process.

76. (new) The blow molded container of Claim 62, wherein the container is blow molded from a multi-layered preform formed by a coextrusion process.

77. (new) A multilayer preform including a hollow body and an externally threaded neck providing communication with the hollow body, the multilayer preform comprising:

a first layer of plastic foam including foam cells;

a second layer of plastic foam including foam cells; and

a third layer of plastic disposed between said first layer and said second layer, wherein the hollow body and threaded neck are formed from said first layer of plastic, said second layer of plastic, and said third layer of plastic.

78. (new) The multilayer preform according to Claim 77, wherein said third layer of plastic comprises a polymer selected from the group consisting of polyesters,

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acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.

79. (new) The multilayer preform according to Claim 77, wherein said third layer of plastic comprises a polyester.

80. (new) The multilayer preform according to Claim 77, wherein said third layer of plastic comprises polyethylene terephthalate.

81. (new) The multilayer preform according to Claim 77, wherein said first layer of plastic and said second layer of plastic comprise a polymer selected from the group consisting of polyesters, acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.

82. (new) The multilayer preform according to Claim 77, wherein said first layer of plastic and said second layer of plastic comprise a polyester.

83. (new) The multilayer preform according to Claim 77, wherein said first layer of plastic and said second layer of plastic comprise polyethylene terephthalate.

84. (new) The multilayer preform according to Claim 77, wherein said first layer of plastic and said second layer of plastic are formed from the same polymeric material.

85. (new) The multilayer preform according to Claim 77, wherein said first layer of plastic and said second layer of plastic are formed from the different polymeric materials.

86. (new) The multilayer preform according to Claim 77, wherein said first layer of plastic, said second layer of plastic, and said third layer of plastic are formed from the same polymeric material.

87. (new) The multilayer preform according to Claim 77, wherein said first layer of plastic, said second layer of plastic, and said third layer of plastic are formed from different polymeric materials.

88. (new) The multilayer preform according to Claim 77, wherein the foam cells are formed from a gas comprising a gas selected from the group consisting of carbon dioxide, nitrogen, argon, air, and blends and derivatives thereof.

89. (new) The multilayer preform according to Claim 77, wherein the foam cells contain a gas selected from the group consisting of carbon dioxide, nitrogen, argon, air, and blends and derivatives thereof.

90. (new) The multilayer preform of Claim 77, wherein the preform is formed in a multi-step injection molding process.

91. (new) The multilayer preform of Claim 77, wherein the preform is formed by a coextrusion process.

92. (new) The multilayer preform of Claim 77, wherein said first layer and said third layer are formed by injection of a gas in a supercritical state into a single melt of plastic to produce a multilayered preform suitable for blow molding.

93. (new) A reheat stretch blow molded container including a hollow body and an externally threaded neck providing communication with the hollow body, the container comprising:

- a first layer of plastic foam including foam cells;
- a second layer of plastic foam including foam cells; and

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a third layer of plastic disposed between said first layer and said second layer, wherein the hollow body and forming the threaded neck are formed from said first layer of plastic, said second layer of plastic, and said third layer of plastic.

94. (new) A multilayer preform including a hollow body and an externally threaded neck providing communication with the hollow body, the multilayer preform comprising:

a first layer of plastic foam including foam cells formed by injection of a gas in a supercritical state into a single melt of plastic;

a second layer of plastic foam including foam cells formed by injection of a gas in a supercritical state into a single melt of plastic; and

a third layer of plastic disposed between said first layer and said second layer, where the hollow body and the threaded neck are formed from said first layer of plastic, said second layer of plastic, and said third layer of plastic.

95. (new) The preform of Claim 94, wherein the supercritical gas comprises a gas selected from the group consisting of carbon dioxide, nitrogen, argon, air, and blends and derivatives thereof.

96. (new) The preform of Claim 94, wherein the preform is formed in a multi-step injection molding process.

97. (new) The preform of Claim 94, wherein the preform is formed by a coextrusion process.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: Note that the examiner's amendment is sufficient to overcome the 112 claim rejections, the art rejections and provisional double patenting rejections and sufficient to place the instant claims in condition for allowance. The support for the amendment can be found in the description set forth in paragraphs 10 and 11, and original claim 13 of the specification of the present invention.

Of the references of record, the most pertinent are Clarke (US 6,358,446), Johnson et al (US 4,872,573), Bland et al (US 5,215,691) and Giblin et al (US 6,223,946).

Clarke teaches a container having a hollow body and an externally threaded neck. Clarke fails to teach the threaded neck that includes a foam layer. Likewise, Clarke fails to teach the hollow body and the threaded neck made from the three layers set forth in the claims.

Johnson teaches a bottle cap having a hollow body and an internally threaded neck. Johnson does not teach the threaded neck comprising a foam layer. Likewise, Johnson fails to teach the hollow body and the threaded neck made from the three layers set forth in the claims.

Bland teaches a composite foam article by the coextrusion comprising a five layer structure: film/foam/film/foam/film (example 3). The foam cells are filled with carbon dioxide (column 5, line 54-55). The foamed layer and non-foamed layer are made of the same or different materials (column 5, lines 35-45). Bland is concerned with a composite material prepared by co-extrusion. Therefore, there is no guidance,

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no motivation to form a composite material into a container which has a hollow body and externally threaded neck providing communication with the hollow body.

Giblin teaches a container having a hollow body and an internally threaded neck. Giblin discloses the container made from a foam layer that is sandwiched between two non-foam layers. There is no motivation to form a container having a hollow body and an externally threaded neck providing communication with the hollow body wherein the hollow body and the threaded neck are made from a foam layer, a plastic layer and a foam layer set forth in the claim.

Note that, none of the cited art, alone or in combination, teaches or suggests the blow molded plastic container with the structure as recited by the claims. Accordingly, the instant claims are deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai Vo/
Primary Examiner, Art Unit 1794